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First record of *Vanellus vanellus* (Linnaeus, 1758) (Aves, Charadriidae), Northern Lapwing, in Malaysia at the southernmost occurrence of the species' range

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Abstract. *Vanellus vanellus* (Linnaeus, 1758) (Aves, Charadriidae), Northern Lapwing, is listed as Near Threatened by the IUCN due to declines in the availability of its habitat since 1980. The species is a widespread Palearctic breeder and an uncommon migrant to Southeast Asia, where it winters in Thailand and Vietnam. We document the first recorded sighting of *V. vanellus* in Malaysia, marking the southernmost occurrence of the species to date.

Key words. Migratory shorebird, new record, Peninsular Malaysia, range expansion

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INTRODUCTION

Vanellus vanellus (Linnaeus, 1758) (Aves, Charadriidae), Northern Lapwing, is a shorebird with a wide geographical range across Europe and parts of Asia, where it inhabits open grasslands, wetlands, and agricultural lands. Its closest relatives are the *V. indicus* Boddaert, 1783 (Red-wattled Lapwing), and *V. cinereus* Blyth, 1842 (Gray-headed Lapwing). Both species are more commonly found in South and Southeast Asia. *Vanellus indicus*, identifiable by its distinctive red facial wattles, and *V. cinereus*, recognized by its gray head and yellow bill, are frequently observed in various wetland habitats across the region (Puan et al. 2020). *Vanellus vanellus* has distinctive morphology, which includes a prominent black crest on its head, contrasting black-and-white facial markings, and iridescent green upperparts (Lee et al. 2018; Robson 2020). The global population of *V. vanellus* was estimated at 10,500,000 individuals; however, the European population size is suspected to have moderately decreased by 30–49% since 1980. The species' conservation status was changed in 2015 from Least Concern to Near Threatened on the IUCN Red List, a shift attributed primarily to land-use intensification (BirdLife International 2024).

METHODS

We conducted bird surveys at the paddy field at Jalan Selendang, Kuala Rompin, in Pahang on the east coast of Peninsular Malaysia as part of a regular monitoring effort under a citizen-science initiative using the eBird platform. Observations were made using Nikon Monarch M7 10×42 binoculars and photographed using a Nikon B700 camera. We sighted a single individual and species identification was aided by Robson (2020). Figure 2 was produced using QGIS v. 3.38.

RESULTS

***Vanellus vanellus* (Linnaeus, 1758)**
Figure 1

New record. MALAYSIA – Pahang • district of Rompin, Kuala Rompin; 02°44′24″N, 103°29′24″E; 4 m elev.; 29.I.2021; Mohd Ros Effendi obs.; in a paddy field.

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Figure 1. Vanellus vanellus, in a paddy field, Kuala Rompin, District of Rompin, Pahang, Malaysia, 29 January 2021.

Identification. The bird was identified as *V. vanellus* by its size, posture, and distinctive, long crest that sets it apart from *V. indicus* and *V. cinereus*. The bird exhibited the typical foraging behavior of lapwings, involving short runs punctuated by pauses to pick up food items from the ground; in this respect, it closely resembled the behavior of *V. indicus* and *V. cinereus*, which are also well-adapted to similar wetland and agricultural environments.

DISCUSSION

Vanellus vanellus is less common in Southeast Asia, and our report is the first documented record from Malaysia (Figure 2). The nearest confirmed sightings of *V. vanellus* are in Pattaya, Chon Buri province, Thailand, and Cam Ranh, Khánh Hòa province, Vietnam, making our sighting of this species the southernmost in Southeast Asia (eBird 2024). This discovery marks a significant expansion of the known wintering range of *V. vanellus* and may indicate potential changes in its migratory behavior or distribution pattern. However, further research and monitoring are necessary to determine the causes of this range expansion. This sighting may be attributed to migratory errors, where birds occasionally deviate from their typical routes due to storms, disorientation, or other environmental influences (Lees and Gilroy 2022).

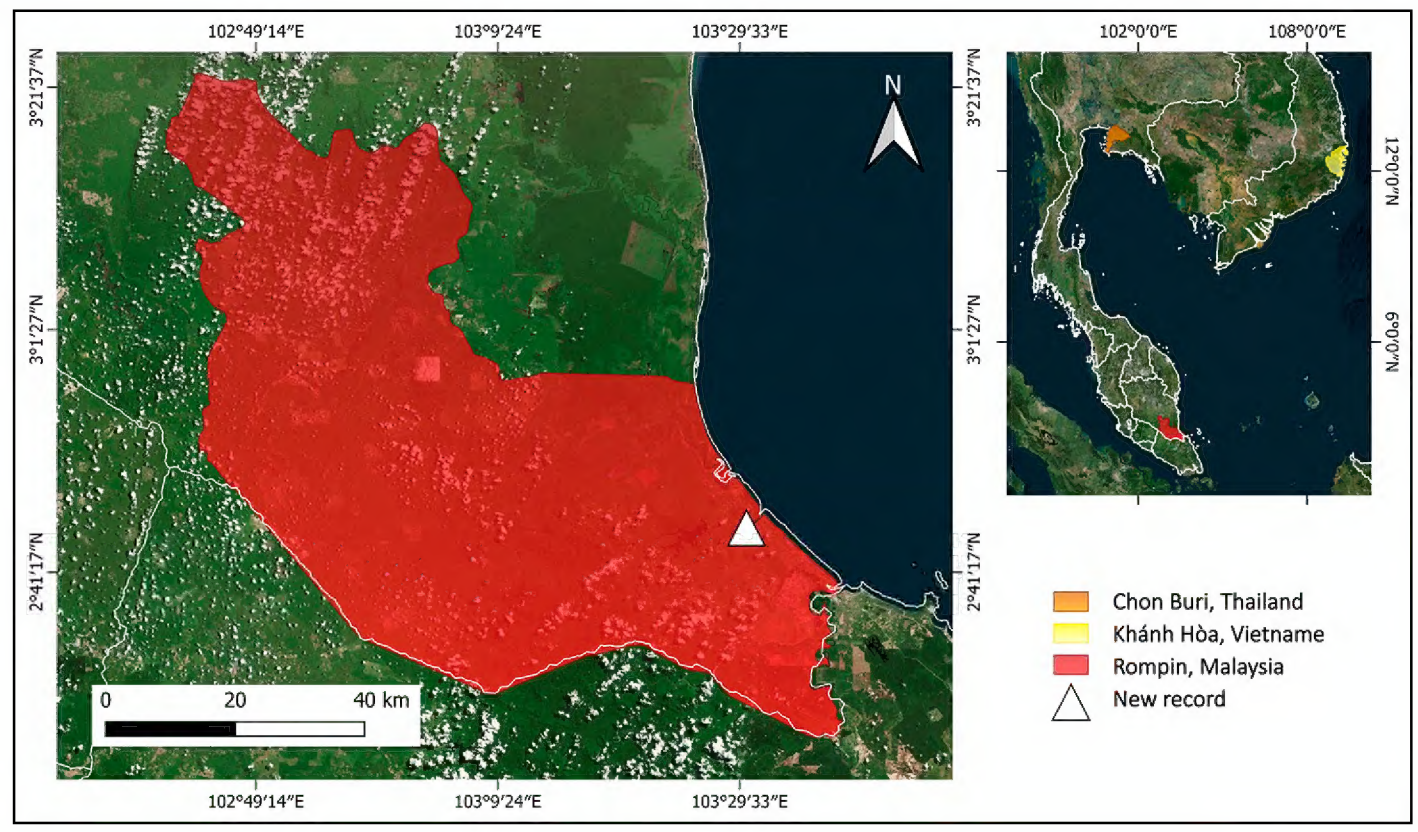

Figure 2. Previous sightings of *Vanellus vanellus* in Pattaya, Chon Buri province (orange) and Cam Ranh, Khánh Hòa province (yellow). The new record in Kuala Rompin in the Rompin district (triangle) marks the southernmost occurrence in Southeast Asia.

While some range expansions may seem like rare anomalies, they often signal broader ecological changes that are not always immediately visible. It is equally plausible that this observation represents a pioneering individual exploring new boundaries, which could eventually contribute to a broader migratory path if conditions prove favorable (Winkler et al. 2016). These shifts can result from changes in food availability, which can influence the movement of species in ways interconnected with larger environmental changes. The presence of pioneering individuals is a fundamental aspect of species resilience, driving gradual shifts in distribution and promoting biodiversity by enabling species to colonize new habitats (Johnson 1994; Dufour et al. 2022). While further research is required to determine whether this occurrence is part of a broader trend or simply an isolated event, the implications for migratory bird conservation are significant. With migratory species like *V. vanellus* showing signs of expanding or altering their range, conservation efforts must consider the broader implications of natural and artificial habitat protection across a wider geographic area to mitigate their future loss (Paulino et al. 2024).

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ADDITIONAL INFORMATION

Conflict of interest
The authors declare that no competing interests exist.

Ethical statement
No ethical statement is reported.

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Author contributions
Conceptualization: MRE, MSM. Funding acquisition: MSM. Investigation: MRE. Methodology: MRE. Supervision: MSM. Writing – original draft: MRE. Writing – review and editing: MRE, MSM.

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Data availability
All data that support the findings of this study are available in the main text and Supplementary materials.

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